

What is claimed is:

1. An apparatus for treating a particulate material, comprising an elongated, tunnel-like process chamber having an inlet and an outlet, a material to be treated in said process chamber can be moved from said inlet to said outlet,

a bottom of said process chamber has overlapping guide plates forming slots there between extending in a longitudinal direction of said process chamber, said overlapping guide plates are superimposed in that a process air is introduced via said slots into said process chamber as two flows oriented transversely with respect to said longitudinal direction of said process chamber and said two flows being oriented oppositely toward each other, said two oppositely oriented flows impinge one another along a breaking-up zone,

air guide elements arranged in said bottom, and

an adjustment device for adjusting said air guide elements in such a way that said process air can have superimposed on it a variable movement component in said longitudinal direction.

2. The apparatus of claim 1, wherein said air guide elements are arranged between said overlapping guide plates.

3. The apparatus of claim 1, wherein groups of said air guide elements are provided, each of said group of said guide elements can be adjusted independently to one another by said adjustment device.

4. The apparatus of claim 3, wherein a group has a row of air guide elements arranged one after another in said longitudinal direction.

5. The apparatus of claim 4, wherein air guide elements of one group can be adjusted by a common adjusting element of said adjustment device.

6. The apparatus of claim 5, wherein said adjusting elements of said groups can be individually adjusted by a control system of said adjustment device.
7. The apparatus of claim 1, wherein said air guide elements are designed as pivotable guide fingers.
8. The apparatus of claim 7, wherein a group of guide fingers is provided which group engages with an actuating rod of said adjustment device, a longitudinal displacement of said actuating rod causes the guide fingers of said group to be pivoted.
9. The apparatus of claim 8, wherein said actuating rod is comb-like, having teeth, said teeth of said actuating rod intermesh with a stud pin of a guide finger.
10. The apparatus of claim 9, wherein each guide finger can be pivoted about a bearing pin standing between two of said overlapping guide plates.
11. The apparatus of claim 1, wherein, below said bottom, there is arranged a feed-air box, which, as viewed in said longitudinal direction being subdivided into chambers by transverse walls.
12. The apparatus of claim 11, wherein air distribution grids are arranged in said chambers.
13. The apparatus of claim 1, wherein, below said bottom, there is arranged a feed air box, which, as viewed in the longitudinal direction, is subdivided into chambers by transverse walls, wherein each chamber is provided with an individual air feed.

14. The apparatus of claim 1, wherein, below the bottom, there is arranged a feed air box, which, as viewed in the longitudinal direction, is subdivided into chambers by transverse walls, wherein a blower is arranged in each of said chambers.